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June 8, 1982

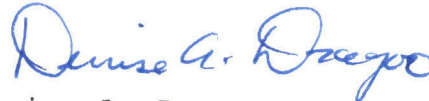
Hand Delivered

Sally Kefer  
Division of Oil, Gas and Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

Dear Sally:

Enclosed please find Tosco Development Corporation's response to the Division's remaining questions concerning ACT/047/001. Please contact me if you have any problem with this response.

Very truly yours,



Denise A. Dragoo

DAD/mgs

Enclosure

June 8, 1982

Mr. James W. Smith, Jr.  
Coordinator of Mined Land Development  
State of Utah Natural Resources and Energy  
Division of Oil, Gas, and Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

Reference: ACT/047/001

Dear Jim:

Attached please find additional clarifying responses to your request of April 7, 1982 which should be incorporated in our application for the Sand Wash Development Shaft and Mine. These responses are the result of our meeting of 7 June 1982 with Sally Kefer and others of your staff. I believe this answers all of the questions that have been raised and I hope that tentative approval review may be scheduled for the June Board hearing.

We sincerely appreciate your staff's expeditious handling of our responses and the professionalism that was exhibited throughout the review. We recognize that it takes a special effort with the current work load.

Sincerely,

John E. Hardaway  
Manager Regulatory Affairs

JEH:jc

Attachment: A/S

cc: Sally Kefer

bcc: A. L. Rampton  
D. Dragoo  
G. C. Kane  
T. D. King  
R. J. Long  
C. P. Eddy

ATTACHMENT

Tosco #

4, 7, 9c

Prior to disturbance of the mine site area delineated on Figures 3.1-1 and 3.1-3\* Tosco will submit to and obtain DOGM approval of the following:

1. A site-specific map showing those soils proposed to be removed from areas proposed to be disturbed, accompanied by any appropriate descriptions of the soil types and an updated estimate of the amount of suitable plant growth material to be removed.

2. Identification of any soils proposed to be removed that are incompatible with the Ekd, CaC, or AkC types so as to warrant separate handling, including stockpiling.

3. Proposed areas of soil redistribution and identification of which stockpiled materials, or materials from other sources, will be used.

4. Site-specific vegetation cover percentages for areas scheduled to be disturbed which are vegetated and one or more site-specific, quantitative revegetation standards based on these percentages. Vegetation cover data will be collected during the appropriate growing season.

of (b) under 1 we need ~~the~~

- ~~field treatment~~  
will be ~~used~~ to expediate invasion.  
- Correlate to soils on this map.

Still need approx. volume needed to reclaim best sites?  
more detail on cultivation?

Tosco intends to recover and stockpile the estimated 28,000 cubic yards of soils. If more or less material is encountered, the Division will be immediately informed. Areas of soil surplus or deficit (for reclamation) will be identified. Tosco plans to revegetate those disturbed areas considered to presently support vegetation. For those disturbed areas that are currently "non-vegetated", Tosco plans to prepare the disturbed seedbed by measures such as cultivation to facilitate invasion by native species.

\*All references are to figures contained in Tosco's Notice of Intention to Mine dated 29 December 1981.

Tosco #

6a, 6b

Need to know  
a concern exists  
prior to estab  
of successful  
stand.

With respect to berming of the soil stockpile, Tosco understands and commits to the use of berms or other additional erosion controls if abnormal and adverse erosion of the stockpile occurs despite revegetation. Tosco agrees that restriction of soil losses is the objective.

9a

tie into  
adequacy  
of

Suitable soils encountered along the alignment of new roads will first be used to make embankments more suitable for vegetation. Excess suitable soil material, if encountered, will be stockpiled on the mine site. Volumes and types of soil that are to be stockpiled on the mine site will be taken into account in determining the size and number of stockpiles.

9b

OK

A copy of the SCS soil surveys are being sent to DOGM under separate cover. The value of 15 is "exchangeable sodium percentage" (ESP) and is taken from the SCS reports.

9d

who will train the  
person?

what about plotted  
prior to  
establish  
above

The "qualified professional" will be trained to make site-specific determinations on which materials will be removed and stockpiled based on visual assessments of physical and chemical characteristics of the soils. The soils and soil associations to be removed will be mapped and staked prior to removal. The topsoil stockpile will be compacted by hauling equipment. The surface will be cultivated, broadcast seeded, raked, and mulched. Irrigation could be employed to supplement precipitation during the first year. (See Section 5.3.1 of Application.)

11

we need to  
is this a prob?  
more tests if  
problems  
show up

With respect to rock material excavated from the shaft, Tosco agrees to arrange to collect approximately four samples of the rock material during shaft construction, to have the samples analyzed for pH and electrical conductivity, and to report the results to the DOGM. These data will be used to assess the suitability of the waste rock for revegetation.

12c

See  
0/0 of tot?  
success end?

Tosco intends to stage reclamation of the coarse ore stockpile such that a portion of the pile will be available for revegetation prior to termination of the Development Shaft and Mine Program. The revegetation procedures are specified on page 70 of the Application. In this manner Tosco will obtain data on the potential success of revegetation of the coarse ore. If these early revegetation efforts are not successful, the data will be provided to the DOGM pursuant to Rule M-10(12)(3) to seek an exemption